

Claims:

- 1 1. An apparatus for processing substrates, comprising:
  - 2 a) a transfer chamber;
  - 3 b) one or more load lock chambers connected to the transfer chamber;
  - 4 c) one or more process chambers connected to the transfer chamber;
  - 5 d) a modular plumbing tray disposed adjacent the transfer chamber and  
6 having facility connections for one or more of the process chambers and the load lock  
7 chambers; and
  - 8 e) a chamber tray disposed adjacent the one or more of the process  
9 chambers, load lock chambers and transfer chamber, the chamber tray having facility  
10 connections connected to one or more facility connections in the plumbing tray.
- 1 2. A method of processing a substrate, comprising:
  - 2 a) introducing a substrate into a load lock chamber from atmospheric  
3 pressure;
  - 4 b) degassing and/or pre-heating the substrate in the load lock chamber;
  - 5 c) introducing the substrate into a transfer chamber; and
  - 6 d) processing the substrate in one or more process chambers.
- 1 3. The method of claim 2 further comprising:
  - 2 e) introducing the substrate into the load lock chamber;
  - 3 f) cooling the substrate in the load lock chamber; and then
  - 4 g) venting the load lock chamber to atmospheric pressure.
- 1 4. An apparatus for distributing facility to devices on a processing system,  
2 comprising:
  - 3 a) an enclosure having at least one facility interface and one or more  
4 chamber interfaces; and

5           b)     one or more of a process gas manifold, vacuum manifold, water  
6 manifold and a helium manifold disposed in the enclosure connected between the at  
7 least one facility interface and the one or more chamber interfaces.

1     5.     An apparatus for distributing facility, comprising:

2           a)     a support frame having one or more of an electronics box, a gas panel, a  
3 vacuum line and a controller device disposed thereon.

1     6.     A method of processing substrates, comprising:

2           a)     positioning a pair of substrates on two blades on separate robots in a  
3 processing system;

4           b)     moving the substrates in parallel to a pair of first process chambers; and  
5 then

6           c)     moving the substrates in parallel to a pair of second process chambers.